

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,276	02/17/2004	Armin Tilke	1890-0061	7063
7	590 01/27/2005		EXAMINER	
Maginot, Moore & Beck			TRAN, THIEN F	
Bank One Tower Suite 3000 ART UNIT				PAPER NUMBER
111 Monument Circle 2811				
Indianapolis, I	N 46204		DATE MAILED: 01/27/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

			/On
	Application No.	Applicant(s)	<del>(&amp;</del>
	10/780,276	TILKE ET AL.	
Office Action Summary	Examiner	Art Unit	
	Thien F. Tran	2811	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the o	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	I36(a). In no event, however, may a reply be ting the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed /s will be considered timely. I the mailing date of this communi ED (35 U.S.C. § 133).	ication.
Status	,		
1) Responsive to communication(s) filed on			
2a) This action is FINAL. 2b) This	s action is non-final.		
3) Since this application is in condition for allowa closed in accordance with the practice under I			its is
Disposition of Claims			
4) ☐ Claim(s) 1-20 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) 1-20 are subject to restriction and/or	wn from consideration.		
Application Papers			
9) The specification is objected to by the Examine	er.		
10)☐ The drawing(s) filed on is/are: a)☐ acc			
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	- · ·	-	
Priority under 35 U.S.C. § 119		٠.	
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicat ority documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stage	e
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) Interview Summary		
<ul> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ul>	Paper No(s)/Mail D  5)  Notice of Informal F  6)  Other:	ate Patent Application (PTO-152)	
S Patent and Trademark Office			

Art Unit: 2811

## **DETAILED ACTION**

## Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-7, drawn to a semiconductor device, classified in class 257, subclass 552.
- II. Claims 8-20, drawn to process for making semiconductor devices, classified in class 438, subclass 22+.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and different products or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case unpatentability of the group I invention would not necessarily imply unpatentability of the method of the group II invention, since the device of the group I invention could be made by processes different from those of the group II invention. For example, the first and second buried first semiconductor layers are formed in two separate doping steps instead of in a single doping step.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

This application is further restricted because it contains claims directed to the following patentably distinct species of the claimed invention:

Species 1 represented by Figure 1,

Species 2 represented by Figure 2,

Species 3 represented by Figure 3,

Species 4 represented by Figure 4,

Species 5 represented by Figure 7.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

Art Unit: 2811

are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thien F. Tran whose telephone number is (571) 272-1665. The examiner can normally be reached on 8:30AM - 5:00PM Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie C. Lee can be reached on (571) 272-1732. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tt January 5, 2005

THIENTRAN
PRIMARY EXAMINER